

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- Sub
A1
- (i) APPLICANTS: The UAB Research Foundation
- (ii) TITLE OF INVENTION: POLYMORPHISM IN Fas PROMOTER and Fas LIGAND PROMOTERS
- (iii) NUMBER OF SEQUENCES: 33
- (iv) CORRESPONDENCE ADDRESS:
- (A) ADDRESSEE: Ellen S. Cogen
Gifford, Krass, Groh, Sprinkle,
Anderson & Citkowski, P.C.
- (B) STREET: 280 N. Old Woodward Ave., Suite 400
- (C) CITY: Birmingham
- (D) STATE: Michigan
- (E) COUNTRY: U.S.
- (F) ZIP: 48009
- (v) COMPUTER READABLE FORM:
- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM
- (C) OPERATING SYSTEM: Windows 98
- (D) SOFTWARE: Microsoft Word 2000
- (vi) CURRENT APPLICATION DATA:
- (A) APPLICATION NUMBER:
- (B) FILING DATE:
- (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
- (A) NAME: Ellen S. Cogen
- (B) REGISTRATION NUMBER: 38,109
- (C) REFERENCE/DOCKET NUMBER: UAB-14452/22
- (ix) TELECOMMUNICATION INFORMATION:
- (A) TELEPHONE: 248-647-6000
- (B) TELEFAX: 248-647-5210

(2) INFORMATION FOR SEQ ID NO. 1:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 18
- (B) TYPE: Nucleic acid

- (C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO. 1:
AAA ACA TTG CGA AAT ACA 18

(3) INFORMATION FOR SEQ ID NO. 2:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

- (iii) HYPOTHETICAL: No

(iv) ANTISENSE: No

(vi) ORIGINAL SOURCE:

(B) STRAIN:

(C) INDIVIDUAL ISOLATE:

(D) DEVELOPMENTAL STAGE:

(F) TISSUE TYPE:

(G) CELL TYPE:

(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 4:

TCA CCA TAA TTT ACA GGT 18

(6) INFORMATION FOR SEQ ID NO. 5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 18

(B) TYPE: Nucleic acid

(C) STRANDEDNESS: Double

(D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

(A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: No

(vi) ORIGINAL SOURCE:

(B) STRAIN:

(C) INDIVIDUAL ISOLATE:

(D) DEVELOPMENTAL STAGE:

(F) TISSUE TYPE:

(G) CELL TYPE:

(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 5:

GTG GGT GTT TCT TTG AGA 18

(7) INFORMATION FOR SEQ ID NO. 6:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 6:

TCT CAA AGA AAC ACC CAC 18

(8) INFORMATION FOR SEQ ID NO. 7:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 25
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:

- (G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 7:

TTA TGC CTA TAA TCC CAG CTA CTC A 25

(9) INFORMATION FOR SEQ ID NO. 8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 22
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

- (A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: Yes

(vi) ORIGINAL SOURCE:

- (B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 8:

CTG GGG ATA TGG GTA ATT GAA G 22

(10) INFORMATION FOR SEQ ID NO. 9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 39
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

- (A) Description: Other nucleic acid

- (xi) SEQUENCE DESCRIPTION: SEO ID NO. 9:

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(11) INFORMATION FOR SEQ ID NO. 10:

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO. 10:

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[illegible]

(12) INFORMATION FOR SEQ ID NO. 11:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 32
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO. 11:
- GGC GGA GGT ACC CTA TAA TCC CAG CTA CTC AG 32

(13) INFORMATION FOR SEQ ID NO. 12:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 31
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:

- (C) INDIVIDUAL ISOLATE:
- (D) DEVELOPMENTAL STAGE:
- (F) TISSUE TYPE:
- (G) CELL TYPE:
- (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 12:

GTT CCG AAG CTT GGC AGC TGG TGA GTC AGG C 31

(14) INFORMATION FOR SEQ ID NO. 13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 29
- (B) TYPE: Nucleic acid
- (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

- (A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: No

(vi) ORIGINAL SOURCE:

- (B) STRAIN:
- (C) INDIVIDUAL ISOLATE:
- (D) DEVELOPMENTAL STAGE:
- (F) TISSUE TYPE:
- (G) CELL TYPE:
- (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 13:

AAA TGA AAA CAT TGT GAA ATA CAA AGC AG 29

(15) INFORMATION FOR SEQ ID NO. 14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 29
- (B) TYPE: Nucleic acid
- (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear

29

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(17) INFORMATION FOR SEQ ID NO. 16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 26
- (B) TYPE: Nucleic acid
- (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

- (A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: Yes

(vi) ORIGINAL SOURCE:

- (B) STRAIN:
- (C) INDIVIDUAL ISOLATE:
- (D) DEVELOPMENTAL STAGE:
- (F) TISSUE TYPE:
- (G) CELL TYPE:
- (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 16:

GCC GAT CAC CAT AAC TTA CAG GTT AA 26

(18) INFORMATION FOR SEQ ID NO. 17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 26
- (B) TYPE: Nucleic acid
- (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

- (A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: No

(vi) ORIGINAL SOURCE:

- (B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

項目	単位	数値	単位	数値	
1. 総人口	人	1,234,567	2. 男性人口	人	612,345
3. 女性人口	人	622,222	4. 0歳人口	人	12,345
5. 1歳人口	人	11,234	6. 2歳人口	人	10,123
7. 3歳人口	人	9,012	8. 4歳人口	人	8,901
9. 5歳人口	人	7,890	10. 6歳人口	人	6,789
11. 7歳人口	人	5,678	12. 8歳人口	人	4,567
13. 9歳人口	人	3,456	14. 10歳人口	人	2,345
15. 11歳人口	人	1,234	16. 12歳人口	人	1,123
17. 13歳人口	人	1,012	18. 14歳人口	人	901
19. 15歳人口	人	890	20. 16歳人口	人	789
21. 17歳人口	人	678	22. 18歳人口	人	567
23. 19歳人口	人	456	24. 20歳人口	人	345
25. 21歳人口	人	234	26. 22歳人口	人	123
27. 23歳人口	人	112	28. 24歳人口	人	101
29. 25歳人口	人	90	30. 26歳人口	人	89
31. 27歳人口	人	78	32. 28歳人口	人	67
33. 29歳人口	人	56	34. 30歳人口	人	45
35. 31歳人口	人	34	36. 32歳人口	人	23
37. 33歳人口	人	12	38. 34歳人口	人	11
39. 35歳人口	人	10	40. 36歳人口	人	9
41. 37歳人口	人	8	42. 38歳人口	人	7
43. 39歳人口	人	6	44. 40歳人口	人	5
45. 41歳人口	人	4	46. 42歳人口	人	3
47. 43歳人口	人	2	48. 44歳人口	人	1
49. 45歳人口	人	1	50. 46歳人口	人	1
51. 47歳人口	人	1	52. 48歳人口	人	1
53. 49歳人口	人	1	54. 50歳人口	人	1
55. 51歳人口	人	1	56. 52歳人口	人	1
57. 53歳人口	人	1	58. 54歳人口	人	1
59. 55歳人口	人	1	60. 56歳人口	人	1
61. 57歳人口	人	1	62. 58歳人口	人	1
63. 59歳人口	人	1	64. 60歳人口	人	1
65. 61歳人口	人	1	66. 62歳人口	人	1
67. 63歳人口	人	1	68. 64歳人口	人	1
69. 65歳人口	人	1	70. 66歳人口	人	1
71. 67歳人口	人	1	72. 68歳人口	人	1
73. 69歳人口	人	1	74. 70歳人口	人	1
75. 71歳人口	人	1	76. 72歳人口	人	1
77. 73歳人口	人	1	78. 74歳人口	人	1
79. 75歳人口	人	1	80. 76歳人口	人	1
81. 77歳人口	人	1	82. 78歳人口	人	1
83. 79歳人口	人	1	84. 80歳人口	人	1
85. 81歳人口	人	1	86. 82歳人口	人	1
87. 83歳人口	人	1	88. 84歳人口	人	1
89. 85歳人口	人	1	90. 86歳人口	人	1
91. 87歳人口	人	1	92. 88歳人口	人	1
93. 89歳人口	人	1	94. 90歳人口	人	1
95. 91歳人口	人	1	96. 92歳人口	人	1
97. 93歳人口	人	1	98. 94歳人口	人	1
99. 95歳人口	人	1	100. 96歳人口	人	1
101. 97歳人口	人	1	102. 98歳人口	人	1
103. 99歳人口	人	1	104. 100歳人口	人	1
105. 101歳人口	人	1	106. 102歳人口	人	1
107. 103歳人口	人	1	108. 104歳人口	人	1
109. 105歳人口	人	1	110. 106歳人口	人	1
111. 107歳人口	人	1	112. 108歳人口	人	1
113. 109歳人口	人	1	114. 110歳人口	人	1
115. 111歳人口	人	1	116. 112歳人口	人	1
117. 113歳人口	人	1	118. 114歳人口	人	1
119. 115歳人口	人	1	120. 116歳人口	人	1
121. 117歳人口	人	1	122. 118歳人口	人	1
123. 119歳人口	人	1	124. 120歳人口	人	1
125. 121歳人口	人	1	126. 122歳人口	人	1
127. 123歳人口	人	1	128. 124歳人口	人	1
129. 125歳人口	人	1	130. 126歳人口	人	1
131. 127歳人口	人	1	132. 128歳人口	人	1
133. 129歳人口	人	1	134. 130歳人口	人	1
135. 131歳人口	人	1	136. 132歳人口	人	1
137. 133歳人口	人	1	138. 134歳人口	人	1
139. 135歳人口					

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 17:

ATA ATG TAT AAA ATA GCA TGC AAT TA 26

(19) INFORMATION FOR SEQ ID NO. 18:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 26
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
- (A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: Yes
- (vi) ORIGINAL SOURCE:
- (B) STRAIN:
 - (C) INDIVIDUAL ISOLATE:
 - (D) DEVELOPMENTAL STAGE:
 - (F) TISSUE TYPE:
 - (G) CELL TYPE:
 - (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 18:

TAA TTG CAT GCT ATT TTA TAC ATT AT 26

(20) INFORMATION FOR SEQ ID NO. 19:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 30
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
- (A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No

(vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

AGT GAG TGG GTG TTT GTT TGA GAA GCA GAA 30

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	30
(B)	TYPE:	Nucleic acid
(C)	STRANDEDNESS:	Double
(D)	TOPOLOGY:	Linear

(iii) HYPOTHETICAL: No

(vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

TTC TGC TTC TCA AAC AAA CAC CCA CTC ACT 30

(22) INFORMATION FOR SEQ ID NO. 21:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 21:

GCG AAA TCC AAA CCA GCT 18

(23) INFORMATION FOR SEQ ID NO. 22:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: Yes
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:

(G) CELL TYPE:

(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 22:

AGC TGG TTT GGA TTT CGC 18

(24) INFORMATION FOR SEQ ID NO. 23:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 78
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear

(ii) MOLECULE TYPE:

(A) Description: Other nucleic acid

(iii) HYPOTHETICAL: No

(iv) ANTISENSE: No

(vi) ORIGINAL SOURCE:

(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 23:

GGC GGA GGT ACC GTG GGT GTT TCT TTG AGA
GTG GGT GTT TCT TTG AGA GTG GGT GTT TCT
TTG AGA GGT ACC TAA TGA

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(25) INFORMATION FOR SEQ ID NO. 24:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 78
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear

- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: Yes
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 24:

TCA TTA GGT ACC TCT CAA AGA AAC ACC CAC
TCT CAA AGA AAC ACC CAC TCT CAA AGA AAC
ACC CAC GGT ACC TAA TGA

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(26) INFORMATION FOR SEQ ID NO. 25:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO. 25:

GGC GGA GGT ACC GTG GGT GTT TGT TTG AGA
GTG GGT GTT TGT TTG AGA GTG GGT GTT TGT
TTG AGA GGT ACC TAA TGA

78

(27) INFORMATION FOR SEQ ID NO. 26:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: Yes
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 26:

TCA TTA GGT ACC TCT CAA ACA AAC ACC CAC
TCT CAA ACA AAC ACC CAC TCT CAA ACA AAC
ACC CAC GGT ACC TAA TGA

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(28) INFORMATION FOR SEQ ID NO. 27:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid

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- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
- (B) STRAIN:
 - (C) INDIVIDUAL ISOLATE:
 - (D) DEVELOPMENTAL STAGE:
 - (F) TISSUE TYPE:
 - (G) CELL TYPE:
 - (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 27:

TGC AGA TTG CGC AAT CTG CA

20

(29) INFORMATION FOR SEQ ID NO. 28:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 18
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
- (A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
- (B) STRAIN:
 - (C) INDIVIDUAL ISOLATE:
 - (D) DEVELOPMENTAL STAGE:
 - (F) TISSUE TYPE:
 - (G) CELL TYPE:
 - (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 28:

GTG GGT GTT TGT TTG AGA

18

T02200 T0570250

(30) INFORMATION FOR SEQ ID NO. 29:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 29:

AAA ACA TTG CGA AAT ACA 18

(31) INFORMATION FOR SEQ ID NO. 30:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:

- (D) DEVELOPMENTAL STAGE:
- (F) TISSUE TYPE:
- (G) CELL TYPE:
- (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 30:

ACC TGT AAA TTA TGG TGA 18

(32) INFORMATION FOR SEQ ID NO. 31:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
 - (A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
 - (B) STRAIN:
 - (C) INDIVIDUAL ISOLATE:
 - (D) DEVELOPMENTAL STAGE:
 - (F) TISSUE TYPE:
 - (G) CELL TYPE:
 - (H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 31:

TGT CGA ATG CAA ATC ACT AGA A 22

(33) INFORMATION FOR SEQ ID NO. 32:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear

- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 32:

GCG AAA TAC AAA GCA GCT 18

(34) INFORMATION FOR SEQ ID NO. 33:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18
(B) TYPE: Nucleic acid
(C) STRANDEDNESS: Double
(D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE:
(A) Description: Other nucleic acid
- (iii) HYPOTHETICAL: No
- (iv) ANTISENSE: No
- (vi) ORIGINAL SOURCE:
(B) STRAIN:
(C) INDIVIDUAL ISOLATE:
(D) DEVELOPMENTAL STAGE:
(F) TISSUE TYPE:
(G) CELL TYPE:
(H) CELL LINE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO. 33:

GCG AAA TCC AAA CCA GCT 18